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1-30. (CANCELED)

31. (NEW) An interlacing device (10, 10') for a machine (1) which palletizes elongated products (2) that are designed to be deposited in superimposed rows on at least one transport pallet (7), the interlacing device (10, 10') comprising:

at least one interlacing gantry (11, 11') extending generally parallel to and along at least a portion of a length of the products (2) and comprising;

at least two upright posts joined at the top by a cross-beam, the interlacing gantry (11, 11') further comprising;

at least one guide (20, 20') supplied by at least one spool (12) of interlacing material (12'); and

wherein the interlacing device (10, 10') also comprises drive means independent from the operation of the machine (1) which palletizes the elongated products (2), the drive means being connected to the interlacing gantry (11, 11') for displacing the interlacing gantry (11, 11') between at least two alternate end positions so as to displace the guide (20, 20') in at least one interlacing plane (P) that is essentially perpendicular to the palletized products (2) alternately from one side to another side of the transport pallet (7).

32. (NEW) The interlacing device according to claim 31, wherein the drive means cause the interlacing gantry (11, 11') to pivot alternately at least one time.

33. (NEW) The interlacing device according to claim 31, wherein the drive means (14) cause the interlacing gantry (11, 11') to move in alternate translation at least one time.

34. (NEW) The interlacing device according to claim 31, wherein the drive means (14) are selected from the group comprising at least electric motors (15), hydraulic and pneumatic cylinders.

35. (NEW) The interlacing device according to claim 34, wherein the drive means (14) comprise at least one transmission system selected from the group comprising at least pinions and chain (16), pulley and belt.

36. (NEW) The interlacing device according to claim 33 further comprising at least one chassis (19) equipped with guide means for moving the interlacing gantry (11, 11') translationally.

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37. (NEW) The interlacing device according to claim 36, wherein the guide means comprises at least one pathway (18) formed in the chassis (19) to receive rollers (17) integral with vertical posts (11a) on the interlacing gantry (11, 11').

38. (NEW) The interlacing device according to claim 31, wherein the interlacing gantry (11, 11') comprises at least two guides (20, 20') located on the interlacing gantry (11, 11') to distribute at least two interlacing ties (12') in at least two essentially parallel interlacing planes (P) distributed along the palletized products (2).

39. (NEW) The interlacing gantry according to claim 38, wherein at least one of the two guides (20') is associated with activating means (21) which displace the at least one of the two guides (20') in alternate translation along the interlacing gantry (11') for a predetermined distance (D) to displace the interlacing plane (P) essentially parallel to itself.

40. (NEW) The interlacing device according to claim 39, wherein the activating means (21) are selected from the group comprising at least electric motors, hydraulic and pneumatic cylinders.

41. (NEW) A palletizing machine (1) for elongated cylindrical products (2) comprising:

at least one gantry (3), one movable carrier (4) in vertical translation along the gantry (3), at least one movable gripping device (5) in horizontal translation on the carrier (4) and designed to remove the products (2) from a storage ramp (6) and deposit them on a transport pallet (7);

at least one interlacing device (10, 10') comprising at least one interlacing gantry (11, 11') extending generally parallel to and along at least a portion of a length of the products (2), the interlacing gantry (11, 11') comprising at least one guide (20, 20') supplied by at least one spool (12) of interlacing material (12'); and

wherein the interlacing device (10, 10') also comprises drive means separate from the operation of the palletizing machine (1) which palletizes the elongated cylindrical products (2), the drive means being connected to the interlacing gantry (11, 11') for displacing the interlacing gantry (11, 11') between at least two alternate end positions so as to displace the guide (20, 20') in at least one interlacing

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plane (P) that is essentially perpendicular to the palletized products (2) alternately from one side to another side of the transport pallet (7).

42. (NEW) The palletizing machine according to claim 41, wherein the at least one interlacing gantry (11, 11') has dimensions that permit the interlacing device (10, 10') to be integrated within the gantry (3) of the palletizing machine (1) below the gripping device (5) and outside the transport pallet (7) and the palletized products (2).

43. (NEW) The palletizing machine according to claim 41, wherein the gripping device (5') comprises means for controlling a drive means associated with the drive means for the palletizing machine (1) in order to displace the interlacing gantry (11, 11') alternately from one side of the transport pallet (7) to the other essentially parallel to the interlacing planes as the palletizing of the products (2) deposited on the transport pallet (7) progresses and according to a predetermined interlacing pattern.

44. (NEW) The palletizing machine according to claim 41, wherein at least one of the guides (20') on the interlacing device (10') is associated with activating means (21) designed to displace the at least one of the guides (20') in alternate translation along the interlacing gantry (11') for a predetermined distance (D) so as to displace the corresponding interlacing plane (P) essentially parallel to itself.

45. (NEW) The palletizing machine according to claim 43, wherein the control means are designed to control the means (21) for activating the guide (20') so as to wrap the interlacing material (12') around posts (7') on the transport pallet (7) as palletization of the products (2) progresses and in a predetermined interlacing pattern.

46. (NEW) An interlacing device (10, 10') for interlacing a tie material between palletized products deposited by a palletizing machine, the interlacing device comprising:

an interlacing gantry (11, 11') extending generally parallel to and along at least a portion of a length of the palletized products (2), the interlacing gantry (11, 11') having at least one guide (20, 20') supplied by at least one spool (12) of the tie material for facilitating the interlacing of the tie material between the palletized products;

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a drive for displacing the interlacing gantry (11, 11') between a first position and a second position and laying the tie material along at least one interlacing plane (P) so as to separate portions of the palletized products from one another; and

wherein the drive for displacing the interlacing gantry (11, 11') is independent from any drive of the palletizing machine so that operation of the interlacing gantry does not interfere with operation of the palletizing machine.

47. (NEW) The interlacing device according to claim 46, wherein the interlacing gantry further comprises a pair of posts (11a) interconnected at a top end thereof by a cross-beam (11b) and supporting the at least one guide for guiding the tie material relative to the palletized products in alternating translation.

48. (NEW) The interlacing device according to claim 47, wherein the interlacing device further comprises at least one chassis (19) equipped with a pathway for guiding the pair of posts (11a) interconnected by the cross-beam (11b) to move relative to the palletized products in alternating translation.

49. (NEW) The interlacing device according to claim 48, wherein the pathway (18) for guiding the pair of posts (11a) is formed in the chassis (19) to receive rollers (17) supporting the pair of posts (11a).

50. (NEW) The interlacing device according to claim 46, wherein the at least one guide for guiding the tie material relative to the palletized products in alternating translation in a first direction further comprises an actuator means (21) for moving the guide relative to the interlacing gantry in alternating translation in a second direction substantially perpendicular to the first direction to wrap the interlacing material around a post supporting the palletized products.